Amendments to the Claims:

1 - 35. (canceled)

36. (previously presented) A method for the contactless scanning of three-dimensional objects with a collimated light beam such as a laser beam, said method comprising steps of

scanning the object by at least two different measuring sections, and

combining the measurement values of the measuring sections,

wherein the lines of the measurement points of two different measuring sections are not parallel and/or the object rotates in one measuring section and not in the other in the case of two different measuring sections.

37. (previously presented) The method claimed in claim 36 wherein the light beam is directed to the object via a mirror arrangement.

38. (previously presented) The method claimed in claim 36 wherein the object is tilted in at least one measuring section with respect to the position of an earlier measuring section.

39. (currently amended) The method claimed in claim 36 wherein the object is scanned in at least one measuring section as ~~is~~ it rotates about an axis of rotation, wherein the light source and/or a mirror arrangement are moved relative to one another for deflecting the light beam and the object so that the measurement points extend along a line on the surface of the object.

40. (previously presented) The method claimed in claim 36 wherein the light beam is moved in approximately parallel lines over the non-rotating object in at least one measuring section.

41. (previously presented) The method claimed in claim 36 wherein the light beam is moved over the non-rotating object in zigzag-shaped lines, the peaks of which can be located outside the object, in at least one measuring section.

42. (previously presented) The method claimed in claim 36 wherein the laser light is directed onto the object at different angles with respect to the surface of the object.

43. (previously presented) The method claimed in claim 36 wherein at least one reference object outside the object is also scanned in addition to the object in predetermined measuring sections.

44. (previously presented) The method claimed in claim 43, wherein a predetermined part of a device for holding the object is also scanned as reference object.

45. (previously presented) The method claimed in claim 36 wherein an auxiliary signal is generated which contains information on at least one of the surface characteristic of the object and the characteristics of the light beam impinging on the object.

46. (previously presented) The method claimed in claim 45, wherein the auxiliary signal is generated by a light receiver.

47. (previously presented) The method claimed in claim 46, wherein the light receiver is color sensitive.

48. (previously presented) The method claimed in claim 46, wherein the light receiver is a camera.

49. (previously presented) The method claimed in claim 48, wherein the camera is a CCD camera.

50. (previously presented) The method claimed in claim 45, wherein measurement values are discarded on the basis of at least one of their signal strength and the information contained in the auxiliary signal.

51. (previously presented) The method claimed in claim 45, wherein the light intensity of the light beam is varied based on the information contained in the auxiliary signal.

52. (previously presented) The method claimed in claim 36 wherein the object is scanned at least once when rotating and at least once when not rotating, the object is tilted in at least one measuring section compared with the position of an earlier measuring section, and the light beam is directed to the object via a rotatable mirror arrangement and in that a part of the holding device is also scanned for referencing in each measuring section.

53. (previously presented) A scanner for the contactless scanning of three-dimensional objects, said scanner comprising

a transmitter for emitting collimated light beams, such as laser beams,

a receiver for detecting light signals,

a holding device for receiving the object,

means for connecting the holding device to a control and computing arrangement,

a deflection arrangement for deflecting the light beam over the surface of the object whereby the object can be scanned by at least two different measuring sections, wherein the lines of the measurement points are not parallel in two different measuring

sections and/or the object rotates during one measuring section and does not during the other one.

54. (previously presented) A scanner as claimed in claim 53, wherein the holding device for the object is rotatable about an axis of rotation.

55. (previously presented) The scanner as claimed in claim 53, further comprising, for one measuring section, an arrangement for tilting the object compared with the position of the object in another measuring section.

56. (previously presented) The scanner as claimed in claim 53, wherein the incident light beam and the holding device can be adjusted relative to one another in such a manner that the light beam can be directed over the entire object.

57. (previously presented) The scanner as claimed in claim 53, wherein the deflection arrangement is provided for directing the light beam in approximately parallel lines over the non-rotating object.

58. (previously presented) The scanner as claimed in claim 53, wherein the deflection arrangement is provided for directing the light beam in approximately zigzag- shaped lines over the non-rotating object, wherein the reversing points of the zigzag line can lie outside the object.

59. (previously presented) The scanner as claimed in claim 53, wherein the deflection arrangement is provided for directing the light beam over the object at different angles to the surface of the object.

60. (previously presented) A scanner for the contactless scanning of three-dimensional objects, said scanner comprising a transmitter for emitting

collimated light beams, particular laser beams, and a receiver for detecting light signals, and a holding device for accommodating the object as claimed in claim 53, further comprising a mirror arrangement for deflecting the light beam to the object.

61. (previously presented) The scanner as claimed in claim 60, wherein the mirror arrangement comprises a number of mirrors which are arranged to be rotatable about a common axis.

62. (previously presented) The scanner as claimed in claim 61, wherein mirrors of the mirror arrangement are mounted at different angles to the axis of rotation of the mirror arrangement.

63. (previously presented) The scanner as claimed in claim 61, wherein the mirrors of the mirror arrangement can be subdivided into at least two identical groups, wherein all mirrors within each group are mounted at different angles to the axis of rotation and the groups are arranged following one another around the axis of rotation.

64. (previously presented) The scanner as claimed in claim 53, further comprising an arrangement for generating an auxiliary signal which contains information about at least one of the surface characteristics of the object and about the characteristics of the scanning light beam on the object.

65. (previously presented) The scanner as claimed in claim 64, wherein a light receiver is provided for detecting the light intensity, the geometric shape and/or the extent of the light beam on the surface of the object and/or of the color and/or the value of reflectivity of the surface of the object in the area of the light beam on the object as a criterion for generating the auxiliary signal.

66. (previously presented) The scanner as claimed in claim 64, wherein the auxiliary signal and the measurement signal can be detected in the same receiver.

67. (previously presented) The scanner as claimed in claims 63, wherein the arrangement has at least one reference object for referencing the measurement points, which is unambiguous, where at least one reference object can be scanned in predetermined measuring sections.

68. (previously presented) The scanner as claimed in claim 67, wherein at least one reference object is located on the holding device or is formed by a part of the holding device.

69. (previously presented) The scanner as claimed in claim 67, wherein the reference object is formed by a conical area on the holding device.

70. (previously presented) The scanner as claimed in claim 67, wherein at least one reference object is formed by an at least partially spherical body.

71 - 73. (canceled)